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L17 ANSWER 1 OF 8 USPATFULL
ACCESSION NUMBER: 2002: 266303 USPATFULL
13-substituted methacycline compounds
Nelson, Mark L., Wellesley, MA, UNITED STATES
Hatta, Beena, Arlington, MA, UNITED STATES
Rennie, Glen, South Weymouth, MA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002147182	A1	20021010	(9)
APPLICATION INFO.:	US 2001-895796	A1	20010629	

		NUMBER	DATE	
PRIORITY INFORMATION:	TION: US	2000-216580P	20000707	(60)
	US	1999-154701P	19990914	(60)
	US	2000-193972P	20000331	(60)
	US	2000-193879P	20000331	(60)
	US	2000-204158P	20000515	(60)
	US	2000-212030P	20000616	(60)
	US	2000-212471P	20000616	(60)

DOCUMENT TYPE: FILE SEGMENT: LEGAL REPRESENTATIVE:

Utility
APPLICATION
Elizabeth A. Hanley, Esq., Lahive & Cockfield, LLP, 28
State Street, Boston, MA, 02109

State Street, Boston, NA, 02109

NUMBER OF CLAIMS: 30

EXEMPLARY CLAIM: 1

LINE COUNT: 1104

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A1 13-substituted methacycline compounds, methods of treating tetracycline responsive states, and pharmaceutical compositions containing the 13-substituted methacycline compounds are described.

IT 233586-00-09 and astibaterial activity of tetracycline type counds)

233586-00-0P

(synthesis and antibacterial activity of tetracycline-type compds.)
233586-00-0 USPATFULL
2-Naphthacenecarboxamide, 9-(2-chloro-1,1-dimethylethyl)-4-(dimethylamino)1,4,4a,5,5a,6,11,12-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-(1-oxopropoxy)-, (45,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 1 OF 8 USPATFULL

233586-24-8 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-{2-(dimethylamino)-1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-25-9 USPATFULL
2-Maphthacenecarboxanide, 5-(benzoyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tertahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-26-0 USPATFULL
Benzeneacetic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-

Absolute stereochemistry.

233586-22-6 USPATFULL

2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl)-5-(formyloxy)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-23-7 USPATEULL

233386-23-7 USFATFULD:
2-Naphthacenecarboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry,

L17 ANSWER 1 OF 8 USPATFULL (Continued)
(dimethylamino) -9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,61,1,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-27-1 USPATFULL

Carbamic acid, dimethyl-, (45,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-28-2 USPATFULL

Cyclopentanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

L17 ANSWER 1 OF 8 USPATFULL (Continued)

233586-29-3 USPATFULL

23)380-29-3 USFATFULK (Cyclobutanearboxy)ic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12-a-octahydro-3,10,12,12-etcrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-30-6 USPATFULL

233365-30-6 Osraffulli Cyclohexanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 2 OF 8 USPATFULL
ACCESSION NUMBER: 2002:243607 USPATFULL
TITLE: TRYENTOR(S): Nelson, Mark L., Vellesley, MA, UNITED STATES
Nelson, Mark L., Vellesley, MA, UNITED STATES
Koza, Darrell, Vesterly, RI, UNITED STATES

A1 20020919 A1 20010615 (9) NUMBER

US 2002132798 US 2001-882505 PATENT INFORMATION: APPLICATION INFO.:

NUMBER DATE

WO 2000-US116632 20000616 US-2000-212470P 20000616 (60) PRIORITY INFORMATION:

Utility
APPLICATION
LAMIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
31

DOCUMENT TYPE: US-2000-212470P 20000616 (60)

DOCUMENT TYPE: US-1200-212470P 20000616 (60)

US-1200-212470P 2000616 (60)

US-1200-212470P 20000616 (60)

US

(synthesis and antibacterial activity of tetracycline-type compds.) 233586-00-0 USPATFULL 2-Naphthacenecarboxamide, 9-(2-chloro-1,1-dimethylethyl)-4-(dimethylamino)-1.4.4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dixo-5-(1-oxopropoxy)-, (45,4a,5,5a,6,12a5)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 233586-01-1F 233586-22-6F 233586-23-7F 233586-24-8F 233586-25-9F 233586-26-0F 233586-29-29 233586-29-3F 233586-30-6F 233586-31-7F

233586-30-69 233586-31-79
(synthesis and antibacterial activity of tetracycline-type compds.)
233586-01-1 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[1,1-dimethyl-2-(1-piperidinyl)ethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-,
(45,4aR,55,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

L17 ANSWER 1 OF 8 USPATFULL (Continued)

233586-31-7 USPATFULL

Cycloheptanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 2 OF 8 USPATFULL (Continued)

Absolute stereochemistry.

233586-22-6 USPATFULL 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-5-(formyloxy)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy,-6-methyl-1,11-dioxo-, (45,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-23-7 USPATFULL

233306-23-7 OSATPULD
2-Naphthacenecarboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-[2(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (45,4aR,5S,5aR,6R,12aS)(9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-24-8 USPATFULL 2-NaphthaceneCarboxamide, 4-(dimethylamino)-9-{2-(dimethylamino)-1,1-

L17 ANSWER 2 OF 8 USPATFULL (Continued)
dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

233886-25-9 USPATFULL
2-Naphthacenecarboxamide, 5-(benzoyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (45,4aR,55,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-26-0 USPATFULL
Benzeneacetic acid, (45,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylathyl]1,4,4,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 2 OF 8 USPATFULL (Continued)

233586-29-3 USPATFULL

Cyclobutanecarboxylic acid, (45,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-30-6 USPATFULL

233380-30-0 UPATFULD.

(Cylohexanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylanino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4.4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 2 OF R USPATFULL (Continued)

233586-27-1 USPATFULL
Carbamic acid, dimethyl-, [45,4aR,55,5aR,6R,12aS)-2-{aminocarbonyl}-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-28-2 USPATFULL
Cyclopentanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydroo-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 2 OF 8 USPATFULL (Continued)

233586-31-7 USPATFULL

233386-31-7 (PSATFULL Cycloheptanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

L17 ANSWER 3 OF 8
ACCESSION NUMBER:
TITLE:
INVENTOR(S):
USPATFULL
2002:236040 USPATFULL
7-phenyl-substituted tetracycline compounds
Nelson, Mark L., Wellesley, MA, UNITED STATES
Ismail, Mohamed Y., Bedford, MA, UNITED STATES

NUMBER KIND DATE US 2002128238 US 2001-883137 A1 20020912 A1 20010615 PATENT INFORMATION: APPLICATION INFO .:

NUMBER DATE US 2000-212030P US 2000-212471P 20000616 (60) 20000616 (60) PRIORITY INFORMATION:

DOCUMENT TYPE: Utility APPLICATION

FILE SEGMENT: LEGAL REPRESENTATIVE: NUMBER OF CLAIMS: EXEMPLARY CLAIM: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109

LINE COUNT: 123

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB 7-phenyl-substituted tetracycline compounds which are substantially free of positional isomers, methods of treating tetracycline responsive states, and pharmaceutical compositions containing the 7-phenyl-substituted tetracycline compounds are described. 7-substituted tetracycline compounds are described. 7-substituted tetracycline compounds are substantially free of positional isomers, methods of treating tetracycline responsive states, and pharmaceutical compositions containing the 7-substituted tetracycline compounds are described.

IT 233586-00-09

(synthesis and antihacterial activity of terroriting terroriting terroriting tetracycline compounds are described.

233586-00-0P
(synthesis and antibacterial activity of tetracycline-type compds.)
233586-00-0 USPATFULL
2-Naphthacenecarboxamide, 9-{2-chloro-1,1-dimethylethyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 233586-01-1P 233586-22-6P 233586-23-7P 233586-24-8P 233586-25-9P 233586-26-0P 233586-27-1P 233586-28-2P 233586-29-3P

L17 ANSWER 3 OF 8 USPATFULL (Continued)

233586-24-8 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethyl-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-охоргорожу)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-25-9 USPATFULL

23J386-23-9 USAFFULD:
2-Naphthacenecarboxamide, 5-(benzoyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tertahydroxy-6-methyl-1,11-dioxo-, (45,4aR,55,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-26-0 USPATFULL
Benzeneacetic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4-

L17 ANSWER 3 OF 8 USPATFULL (Continued)
233586-30-6F 233586-31-7F
(synthesis and antibacterial activity of tetracycline-type compds.)
RN 233586-01-1 USPATFULL
CN 2-Maphthacenecatooxamide, 4-(dimethylamino)-9-[1,1-dimethyl-2-(1-piperidinyl)ethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-,
(45,4aR,55,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-22-6 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-5-(formyloxy)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA

Absolute stereochemistry.

233586-23-7 USPATFULL
2-Naphthacenecarboxamide, 5-{acetyloxy}-4-{dimethylamino}-9-{2-(dimethylamino)-1,1-dimethylethyl}-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry

L17 ANSWER 3 OF 8 USPATFULL (Continued)
(dimethylamino) -9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,61,1,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-27-1 USPATFULL Carbamic acid, dimethyl-, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-(2-(dimethylamino)-1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-28-2 USPATFULL
Cyclopentanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydroo-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

L17 ANSWER 3 OF 8 USPATFULL (Continued)

233586-29-3 USPATFULL

23J306-27-3 USFATFULL Cyclobutanearboxylic acid, (4S, 4aR, 55, 5aR, 6R, 12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-30-6 USPATFULL
Cyclohexanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl)1,4,4a,5,5a,6,11,12-a-octahydro-3,10,12,12-a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 3 OF 8 USPATFULL (Continued)

233586+31-7 USPATFULL

Cycloheptanecarboxylic acid, (4S, 4aR, 5S, 5aR, 6R, 12aS) -2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl}1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 4 OF 8 USPATFULL
ACCESSION NUMBER: 2002:236039 USPATFULL
TITLE: 7-N-substituted phenyl tetracycline compounds
Nelson, Mark L., Wellesley, MA, UNITED STATES
Koza, Darrell, Westerly, RI, UNITED STATES

NUMBER KIND DATE A1 20020912 A1 20010615 (9) US 2002128237 US 2001-882273

PATENT INFORMATION: APPLICATION INFO.:

NUMBER DATE

WO 2000-US16672 20000616
US 2000-212139P 20000624
Utility

PRIORITY INFORMATION:

DOCUMENT TYPE: FILE SEGMENT: LEGAL REPRESENTATIVE: NUMBER OF CLAIMS: EXEMPLARY CLAIM: Utility
APPLICATION
LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109

20000616 20000616 (60)

EXEMPLARY CLAIM: 1
LINE COUNT: 1098
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB 7-substituted tetracycline compounds, methods of treating tetracycline responsive states, and pharmaceutical compositions containing the 7-substituted tetracycline compounds are described.

IT 233586-00-0P IT 233586-00-0P

23386-00-0P

(synthesis and antibacterial activity of tetracycline-type compds.)
233586-00-0 USPATFULL
2-Naphthacenecarboxamide, 9-{2-chloro-1,1-dimethylethyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (45,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 233586-01-1P 233586-22-6P 233586-23-7P 233586-24-8P 233586-25-9P 233586-26-0P 233586-27-1P 233586-28-2P 233586-29-3P 233586-30-6P 233586-31-7P

233586-30-69 233586-31-79

(synthesis and antibacterial activity of tetracycline-type compds.)
233586-01-1 USPATFULL

2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[1,1-dimethyl-2-(1-piperidinyl)ethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-,

(45,4aR,55,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 4 OF 8 USPATFULL (Continued)

233586-22-6 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylathyl)-5-(formyloxy)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (45,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-23-7 USPATFULL
2-Naphthacenecarboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-24-8 USPATFULL 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethyllethyl]-1,4,4,5,5s,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (45,4aR,55,5aR,6R,12a5)- (9CI) (CA

L17 ANSWER 4 OF 8 USPATFULL (Continued) INDEX NAME)

Absolute stereochemistry.

233586-25-9 USPATFULL
2-Maphthacenecarboxamide, 5-(benzoyloxy)-4-(dimethylamino)-9-{2-(dimethylamino)-1,1-dimethylethyl}-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-26-0 USPATFULL
Benzeneacetic acid, (45,4aR,5s,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydroo-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 4 OF 8 USPATFULL (Continued)

233586-29-3 USPATFULL

Cyclobutanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-30-6 USPATFULL

Cyclohexanecarboxyllc acid, (45,4aR,55,5aR,6R,12aS)-2-{aminocarbonyl}-4-(dimethylamino)-9-[2-|dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,1,1,12-a-octahydro-3,10,12,12-a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 4 OF 8 USPATFULL (Continued)

233586-27-1 USPATFULL
Carbamic acid, dimethyl-, (45,4aR,55,5aR,6R,12a5)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydroc-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-28-2 USPATFULL
Cyclopentanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylathyl)1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 4 OF 8 USPATFULL (Continued)

233586-31-7 USPATFULL

23)380-31-7 USFAIRULE
(Cyloheptanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

L17 ANSWER 5 OF 8 USPATFULL ACCESSION NUMBER: 2002:228474 USPATFULL COMPOUNDS AND METHODS OF USE PHARMACEUTICALLY ACTIVE COMPOUNDS AND METHODS OF USE

THEREOF
LEVY, STUART B., BOSTON, MA, UNITED STATES
NELSON, MARK L., WELLESLEY, MA, UNITED STATES INVENTOR(S):

NUMBER KIND DATE

US 2002123637 US 1999-234847 A1 20020905 A1 19990122 PATENT INFORMATION: APPLICATION INFO.: (9)

NUMBER DATE 19980123 (60)

US 1998-72262P Utility APPLICATION PRIORITY INFORMATION:

DOCUMENT TYPE: FILE SEGMENT: LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109 29

NUMBER OF CLAIMS: EXEMPLARY CLAIM: LINE COUNT: 1568

LIME COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention includes new substituted tetracycline-type compounds that exhibit significant antibacterial activity, including against both gram-positive and gram-negative bacteria. It has been found that compounds of the invention are highly active against both gram positive and gram negative tetracycline sensitive and tetracycline resistant bacteria.

IT 23386-00-01

(synthesis and antibacterial activity of tetracycline-type compds.)
233586-00-0 USPATFULL
2-Naphthacenecarboxamide, 9-(2-chloro-1,1-dimethylethyl)-4-(dimethylamino)1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-(1-oxopropoxy)-, (4s,4aR,Ss,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 233586-01-1P 233586-22-6P 233586-23-7P 233586-24-8P 233586-25-9P 233586-26-0P 233586-27-1P 233586-28-2P 233586-29-3P

233586-30-6P 233586-31-7P

(synthesis and antibacterial activity of tetracycline-type compds.)

L17 ANSWER 5 OF 8 USPATFULL (Continued)

233586-24-8 USPATFULL
2-Naphthacenecatboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-25-9 USPATFULL
2-Naphthacenecarboxanide, 5-(benzoyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,-1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)(9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-26-0 USPATFULL Benzeneacetic acid, (45,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-

L17 ANSWER 5 OF 8 USPATFULL (Continued)
RN 233586-01-1 USPATFULL
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[1,1-dimethyl-2-(1-piperidinyl)ethyl]-1,4,4m,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dimox-5-(1-oxopropoxy)-,(45,4aR,Ss,5a,Rs,12as)-(SCI) (CA INDEX NAME)

Absolute stereochemistry.

233586-22-6 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-5-[forw]loxy)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-23-7 USPATFULL
2-Naphthacenecarboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylathyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 5 OF 8 USPATFULL (Continued)
(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6|1,1,2a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-27-1 USPATFULL

Carbamic acid, dimethyl-, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-28-2 USPATFULL

Cyclopentanecarboxylic acid, (4S.4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

L17 ANSWER 5 OF R USPATFULL (Continued)

233586-29-3 USPATFULL

Z3J380-29-3 USFAIRULE
(Cyclobutnecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12-acotahydro-3,10,12,12-atetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-30-6 USPATFULL
Cyclohexanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12-ao-otthydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 6 OF 8
ACCESSION NUMBER:
TITLE:
Tetracycline compounds for treatment of Cryptosporidium parvum related disorders
Levy, Stuart B., Boston, MA, UNITED STATES
Nelson, Mark L., Wellesley, MA, UNITED STATES

NUMBER US 2002115644 US 2001-768189 PATENT INFORMATION: APPLICATION INFO.:

NUMBER DATE

PRIORITY INFORMATION: DOCUMENT TYPE: FILE SEGMENT: LEGAL REPRESENTATIVE: NUMBER OF CLAIMS: EXEMPLARY CLAIM: US 2000-178519P 20000124 (60)

APPLICATION
LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
77

EXEMPLARY CLAIM: 1
LINE COUNT: 999
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods and compositions for treating Cryptosporidium parvum related disorders in a mammal are discussed. Soveral novel tetracycline compounds useful for treating Cryptosporidium parvum related disorders are also included.

IT 233585-00-0P

233586-00-0P

(synthesis and antibacterial activity of tetracycline-type compds.)
233586-00-0 USPATFULL

2-Naphthacenecarboxamide, 9-(2-chloro-1,1-dimethylethyl)-4-(dimethylamino)1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 233586-01-1P 233586-22-6P 233586-23-7P 233586-24-8P 233586-25-9P 233586-26-0P 233586-27-1P 233586-28-2P 233586-29-3P 233586-30-6P 233586-31-7P

Z33586-30-6P 233586-31-7P

(synthesis and antibacterial activity of tetracycline-type compds.)
233586-01-1 USPATFULL

Z-Naphthaceusearboxamide, 4-(dimethylamino)-9-[1,1-dimethyl-2-(1-piperidinyl)ethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-,
(4S,4aR,55,5aR,6R,12aS)- (SCI) (CA INDEX NAME)

L17 ANSWER 5 OF 8 USPATFULL (Continued)

233586-31-7 USPATFULL

Cycloheptanecarboxylic acid, (4S, 4aR, SS, 5aR, 6R, 12aS) -2-(aminocarbonyl) -4(dimethylamino) -9-[2-(dimethylamino) -1,1-dimethylethyl] 1,4,4a, 5,5a, 6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 6 OF 8 USPATFULL (Continued) Absolute stereochemistry.

233586-22-6 USPATEULL

Absolute stereochemistry.

233586-23-7 USPATFULL

23338e-23-7 USPATFULL 2-Maphthacenecarboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-24-8 USPATFULL 2-Naphthacenecarboxamic

Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-

L17 ANSWER 6 OF 8 USPATFULL (Continued)
methyl-1,11-dioxo-5-(1-охоргороху)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

233586-25-9 USPATFULL
2-Naphthacenecarboxamide, 5-(benzoyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-26-0 USPATFULL
Benzeneacetic acid, (45,4aR,5s,5aR,6R,12as)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl)1,4,4a,5,5a,6,11,12a-octahydroo-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 6 OF 8 USPATFULL (Continued)

233586-29-3 USPATFULL
Cyclobutanecarboxylic acid, (45,4aR,55,5aR,6R,12a5)-2-(aminocarboxyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233596-30-6 USPATFULL
Cyclohexanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacomyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 6 OF 8 USPATFULL (Continued)

233586-27-1 USPATFULL
Carbamic acid, dimethyl-, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5,4a,611,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-28-2 USPATFULL
Cyclopentanecarboxylic acid, (4S,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl)1,4,4a,5,5a,6,11,12a-octahydroo3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 6 OF 8 USPATFULL (Continued)

233586-31-7 USPATFULL

Cycloheptanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydroo-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

L17 ANSWER 7 OF 8
ACCESSION NUMBER:
TITLE:
2002:192100 USPATFULL
7-and 9 - Carbamate, urea, thiourea, thiocarbamate, and heteroaryl-amino substituted tetracycline compounds
Melson, Mark L., Wellesley, MA, UNITED STATES
Levy, Stuart B., Booton, MA, UNITED STATES
Frechette, Roger, Reading, MA, UNITED STATES
Bowser, Todd E., Charlton, MA, UNITED STATES
Ismail, Mohamed Y., Bedford, MA, UNITED STATES

NUMBER KIND DATE US 2002103171 US 2001-823884 A1 20020801 A1 20010330 (9) PATENT INFORMATION: APPLICATION INFO.:

NUMBER DATE US 2000-193972P US 2000-193879P US 2001-280367P Utility APPLICATION 20000331 (60) 20000331 (60) 20010329 (60) PRIORITY INFORMATION:

DOCUMENT TYPE:

CAPITURALIUN LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109 102 FILE SEGMENT: LEGAL REPRESENTATIVE: NUMBER OF CLAIMS: EXEMPLARY CLAIM:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Substituted tetrografic

AB Substituted tetracycline compounds, methods of synthesis, and methods of use are discussed. Tetracyclines useful for treating tetracycline related disorders are also discussed. Intermediates useful for synthesizing other tetracycline compounds are also included.

17 233586-00-09

233586-00-0P
(synthesis and antibacterial activity of tetracycline-type compds.)
233586-00-0 USPATFULL
2-Naphthacenecarboxamide, 9-(2-chloro-1,1-dimethylethyl)-4-(dimethylamino)1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-(1-oxopropoxy)-, (45,4aR,55,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 233586-01-1P 233586-22-6P 233586-23-7P 233586-24-8P 233586-25-9P 233586-26-0P

L17 ANSWER 7 OF 8 USPATFULL (Continued)

233586-24-8 USPATFULL

23330-24-6 Orakifoli. 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylathyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-didxos-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA)

Absolute stereochemistry.

233586-25-9 USPATFULL

2-Naphthacenecarboxamide, 5-(benzoyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-26-0 USPATFULL Benzeneacetic acid, (45,4aR,5s,5aR,6R,12as)-2-(aminocarbonyl)-4-

L17 ANSWER 7 OF 8 USPATFULL (Continued)
233566-27-1P 233586-28-2P 233586-29-3P
233586-30-6P 233586-31-7P
(synthesis and antibacterial activity of tetracycline-type compds.)
RN 233586-01-1 USPATFULL

C 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[1,1-dimethyl-2-(1-piperidinyl)ethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydrowy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-,
(45,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-22-6 USPATFULL 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylathyl)-5-(formyloxy)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (45,4aR,55,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-23-7 USPATFULL
2-Naphthacenecarboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-{2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry

L17 ANSWER 7 OF 8 USPATFULL (Continued)
(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-27-1 USPATFULL

Absolute stereochemistry.

233586-28-2 USPATFULL
Cyclopentanecarboxylic acid, (4S, 4aR, 5S, 5aR, 6R, 12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

L17 ANSWER 7 OF 8 USPATFULL (Continued)

233586-29-3 USPATFULL

23338-29-3 USPATFULL
(Cyclobutanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-30-6 USPATFULL
Cyclohexanecarboxylic acid, (45,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,1,1,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 7 OF 8 USPATFULL

233586-31-7 USPATFULL

cajsor-ir USFAIFULL
Cycloheptanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydroo-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

(Continued)

Absolute stereochemistry.

L17 ANSWER 8 OF 8 USPATFULL
ACCESSION NUMBER:
TITLE: 2002:85560 USPATFULL
7-substituted fused ring tetracycline compounds
Nelson, Mark L., Wellesley, MA, UNITED STATES
McIntyre, Laura, Cambridge, MA, UNITED STATES

DATE NUMBER KIND US 2002045602 A1 20020418 US 2001-852908 A1 20010510 (9) PATENT INFORMATION: APPLICATION INFO.:

NUMBER DATE
US 2000-204158P 20000515 (60) PRIORITY INFORMATION:

DOCUMENT TYPE: FILE SEGMENT: LEGAL REPRESENTATIVE:

US 2000-20159F 20000515 (6U)
UILILITY
APPLICATION
LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
18

LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 021
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1 959
ASS INDEXING IS AVAILABLE FOR THIS PATENT.
AB 7-substituted fused ring tetracycline compounds, methods of treating tetracycline responsive states, and pharmaceutical compositions containing the 7-substituted fused ring tetracycline compounds are described.

IT 233586-00-0P

(synthesis and antibacterial activity of tetracycline-type compds.) 233596-00-0 USPATFULL 2-Naphthacenecarboxamide, 9-(2-chloro-1,1-dimethylethyl)-4-(dimethylam

Absolute stereochemistry.

IT 233586-01-1P 233586-22-6P 233586-23-PP 233586-24-8P 233586-24-8P 233586-25-9P 233586-28-0P 233586-30-6P 233586-30-6P 233586-30-6P 233586-30-6P 233586-30-6P 233586-30-6P 233586-30-6P 233586-31-1P (synthesis and antibacterial activity of tetracycline-type compds.)

RN 233586-01-1 USPATFULL
CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[1,1-dimethyl-2-(1-piperidinyl)ethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (45,4aR,55,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 8 OF 8 USPATFULL (Continued)

233586-22-6 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-5-(formyloxy)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-23-7 USPATFULL
2-Naphthacenecarboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-24-8 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethyllethyl]-1,4,4,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-охоргороху)-, (4S,4aR,5S,5aR,6R,12aS)- [9CI] (СА

L17 ANSWER 8 OF 8 USPATFULL (Continued) INDEX NAME)

Absolute stereochemistry.

233586-25-9 USPATFULL
2-Naphthacenecarboxanide, 5-(benzoyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (45,4aR,55,5aR,6R,12aS)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-26-0 USPATFULL
Benzeneacetic acid, (45,4aR,55,5aR,6R,12a5)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 8 OF 8 USPATFULL (Continued)

233586-29-3 USPATFULL Cyclobutanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-3-[2-(dimethylamino)-1,1-dimethylethyl]-1,1,4,4a,5a,6,11,12a-octahydroc-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-30-6 USPATFULL

Cyclohexanecarboxylic acid, (48,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 8 OF 8 USPATFULL (Continued)

233586-27-1 USPATFULL

Carbamic acid, dimethyl-, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

233586-28-2 USPATFULL
Cyclopentanecarboxylic acid, (45,4aR,55,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydroo-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 8 OF 8 USPATFULL (Continued)

233586-31-7 USPATFULL

Cycloheptanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

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=> d ibib ab fqhit 1-3

L22 ANSWER 1 OF 3 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 137:232491 MARPAT
ITILE: PREPARED TO TEXT ASSIGNEE(S): GlaNO Group Limited, UK
SOURCE: COLEN: EPXKUW

DOCUMENT TYPE: Patent
LANGUAGE: EPRICAD
FAMILY ACC. NUM. COUNT: 1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

L22 ANSWER 2 OF 3 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER:
135:288637 MARPAT
Preparation of 7-and 9-carbamate, urea, thiourea, thiocarbamate, and heteroaryl-amino substituted tetracycline derivatives for pharmaceutical use as antibiotics
INVENTOR(S):
Nelson, Mark L.; Levy, Stuart B.; Prechette, Roger; Bowser, Todd E.; Ismail, Mohamed Y.
Trustees of Tufts College, USA
PCT Int. Appl., 88 pp.
CODEN: PIXXD2
DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:

135:288637 MARPAT
Preparation of 7-and 9-carbamate, urea, thiourea, thiourea

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

L22 ANSWER 1 OF 3 MARPAT COPYRIGHT 2002 ACS (Continued)

= alkoxy<(1-6)>

NH claim 1 and pharmaceutically acceptable derivatives and solvates

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT REFERENCE COUNT:

L22 ANSWER 2 OF 3 MARPAT COPYRIGHT 2002 ACS

182

and pharmaceutically acceptable salts claim $\ensuremath{\mathbf{1}}$

substitution is restricted

REFERENCE COUNT: THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L22 ANSWER 3 OF 3 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER:
TITLE:
124:55682 MARPAT
9-(substituted amino)-6.alpha.-deoxy-5-oxytetracycline derivatives, their preparation and their use as antibiotics
SUN Veriguo
PATENT ASSIGNEE(S):
PATENT ASSIGNEE(S):
PATENT TYPE:
LANGUAGE:
PAMILY ACC. NUM. COUNT:
PATENT INSONATION:
124:55682 MARPAT
9-(substituted amino)-6.alpha.-deoxy-5-oxytetracycline derivatives, their preparation and their use as antibiotics
SU, Veriguo
Pfizer Inc., USA
PCT Int. Appl., 36 pp.
CODEN: PIXXD2
English
English
English DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| 19 2784847 | B2 1990806 | F1 1995-700 | 19950216 |
ER 9500659 | A 19950818 | F1 1995-700 | 19950216 |
US 5834450 | A 1998110 | US 1996-682640 | 19960722 |
ERITY APPLN. INFO: US 1994-198801 | 19940217 |
WO 1995-1826 | 19950112 |
Title compds. I [R1 = H, aminoalkyl; R2 = H, acyl; R3 = acyl, alkanesulfonyl] and their pharmaceutically acceptable salts were prepd. I exhibit antibiotic activity against a wide range of gram-pos. and gram-neg. organisms, including organisms that are resistant to tetracycline antibiotics (no data). Thus, doxycycline war converted to the 9-nitro deriv., which was reduced to the amine and treated with Me2NCH2COC1.HCl to give 9-dimethylglycylaminodoxycycline dihydrochloride.

G1 G10

DER: MPL: STE: or pharmaceutically acceptable salts claim 1 $240\text{--}D,\,L$

Page 17 09/234,847

=> d his (FILE 'HOME' ENTERED AT 12:02:01 ON 18 DEC 2002) FILE 'REGISTRY' ENTERED AT 12:02:06 ON 18 DEC 2002 STRUCTURE UPLOADED L113 S L1 L2 354 S L1 FULL L3 STRUCTURE UPLOADED L413 S L4 FULL SUB=L3 L5 FILE 'USPATFULL' ENTERED AT 12:04:26 ON 18 DEC 2002 8 S L5 L6 FILE 'CAPLUS' ENTERED AT 12:06:25 ON 18 DEC 2002 L7 6 S L5 0 S L7 NOT L6 L8FILE 'MARPAT' ENTERED AT 12:07:33 ON 18 DEC 2002 11 S L5 FULL L9 10 S L9/COM L10FILE 'REGISTRY' ENTERED AT 12:09:52 ON 18 DEC 2002 L11 STRUCTURE UPLOADED L12 13 S L11 FULL SUB=L3 0 S L12 NOT L5 L13 L14STRUCTURE UPLOADED L15 31 S L14 FULL SUB=L3 L16 18 S L15 NOT L12 FILE 'USPATFULL' ENTERED AT 12:12:36 ON 18 DEC 2002 L17 8 S L16 0 S L17 NOT PY>=1998 L18 FILE 'CAPLUS' ENTERED AT 12:12:59 ON 18 DEC 2002 FILE 'USPATFULL' ENTERED AT 12:13:08 ON 18 DEC 2002 FILE 'CAPLUS' ENTERED AT 12:15:09 ON 18 DEC 2002 L19 7 S L16 L20 0 S L19 NOT L17 FILE 'MARPAT' ENTERED AT 12:15:31 ON 18 DEC 2002 14 S L15 FULL 3 S L21 NOT L9 => file reg SINCE FILE TOTAL ENTRY SESSION 64.78 489.17 COST IN U.S. DOLLARS FULL ESTIMATED COSI

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL
ENTRY SESSION
-1.77 -7.67 FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:18:38 ON 18 DEC 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 17 DEC 2002 HIGHEST RN 476608-54-5 DICTIONARY FILE UPDATES: 17 DEC 2002 HIGHEST RN 476608-54-5

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d 114 L14 HAS NO ANSWERS L14 STR

Structure attributes must be viewed using STN Express query preparation.